

Abstract

An apparatus and method is related to wireless communication devices with a reduced-noise recording receiver. The recording receiver receives a transmitted signal, converts the received signal to a digital base-band signal and stores the digitized base-band signal in a buffer for subsequent processing. The stored digital signals are subsequently processed to recover the transmitted data signal. The overall signal integrity in the receiver is improved by performing signal processing after reception is complete. The IF processing section of the receiver includes a frequency band translation section. The frequency band translation section translates the frequency band of the IF signal into a non-harmonically related frequency band. Since the IF signal is in an unrelated frequency band, data can be recovered from the transmission signal with improved signal-to-noise characteristics. At least a portion of the non-essential electronics are disabled during reception to avoid additional interference and sources of noise.

